PATENT

<u>N THE UNITED STATES PATENT AND TRADEMARK OFFICE</u>

Atty Docket Number: A01204

AECM:sd

Patent No.: 6,756,075 B2

In re application of:

DeMasi et al

Confirmation No.: 2104

Serial No: 10/081,681

Group Art Unit: 1762

Filed: February 25, 2002

Examiner: Cameron, Erma C.

In Press Coating Method And Composition For:

Commissioner for Patents Certificate of Corrections P.O. Box 1450

Certificate JAN 2 0 2006

of Correction

Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

Sir:

I hereby certify that the following correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated next to my signature below:

> Petition For Certificate of Correction Under 35 USC §254 Certificate of Correction Copy of Reply to November 26, 2003 Office Action (5 pgs.) Copy of Recordation of Assignment Document Copy of Issue Notification

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty Docket No. A01204
AECM:sd

In re application of DeMasi et al

Serial No.: 10/081,681 : Patent No.: 6,756,075 B2

Filed: February 25, 2002 : Group Art Unit: 1762

Confirmation No.: 2104 : Examiner: Cameron, Erma C.

For: IN-PRESS COATING METHOD AND COMPOSITION

Commissioner for Patents Attention Certificate of Correction Branch P.O. Box 1450 Alexandria, VA 22313-1450

PETITION FOR CERTIFICATE OF CORRECTION UNDER 35 USC §254

Sir:

In accordance with 37 CFR 1.322 (a)(1)(i), it is respectfully requested that the attached Certificate of Correction be issued for the above-identified patent.

Please note that the referenced error(s) is/are the printer's and therefore no fee is due. See "Reply to November 26, 2003 Office Action" at page 2, claim 1, last line. Copies of the Notice of Recordation of Assignment Document and Issue Notification are also enclosed.

Respectfully submitted,

Andrew E. C. Merriam
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Registration No. 47,268

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Rohm and Haas Company 100 Independence Mall West Philadelphia, PA 19106-2399

Encl: Copies of the Notice of Recordation of Assignment Document and Issue Notification

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 6,756,075 B2

DATED

: June 29, 2004

INVENTOR(S): Anne S.DeMasi, Rosemarie Palmer Lauer

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims:

Claim 1, column 10, line 30, after "emulsion", please delete "sepolymer" and insert therefore --polymer--

MAILING ADDRESS OF SENDER:

PATENT NO. :

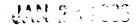
6,756,075 B2

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.







IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket Number:

DN A01204

Application of:

Anne S. DeMasi et al.

Serial No:

10/081,681

Group Art Unit:

1762

Filed:

February 25, 2002

(Priority to 19-Mar-01)

Examiner:

Erma Cameron

Title:

IN-PRESS COATING METHOD AND COMPOSITION

Mail Stop NON-FEE AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

REPLY TO NOVEMBER 26, 2003 OFFICE ACTION

This is a reply to the November 26, 2003 office action. No fees are believed due, but if any are due, please charge Deposit Account No. 18-1850 accordingly. This reply comprises:

Amendments to the Claims, starting on page 2; and Remarks, starting on page 4.

CERTIFICATE OF TRANSMISSION

I certify that this paper, along with any referred to as being attached or enclosed, is being facsimile transmitted to (703) 872-9306 under 37 CFR § 1.8 on the date indicated below and is addressed to Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

FEB. 25 2004

Date of Deposit

Signature of Person Mailing Paper

KARL STAUSS

Name of Person Mailing Paper

AMENDMENTS TO THE CLAIMS

The claims listed below replace all prior versions and listings of claims in the application.

- 1. (Currently Amended) A method for the manufacture of an in-press coated composite substrate, comprising:
 - (a) applying a sealing layer of an aqueous coating composition to a surface of a compressible mat comprising fibers, chips or particles and a resin, wherein the mat comprises a resin and one or more of fibers, chips or particles;
 - (b) compressing the mat and applied <u>sealing layer of</u> coating composition between heated metal surfaces in a press; and
- (c) releasing the compressed, coated composite substrate from the press; characterized in that the <u>sealing layer of</u> aqueous coating composition comprises an aqueous emulsion expolymer and a ground ion exchange resin.
- 2. (Currently Amended) The method of Claim 1 wherein the fibers, chips, particles and resin used to form the mat comprises one or more compositions are selected from cellulose, glass, synthetic polymers, carbon and organic or inorganic cementitious compositions and combinations thereof.
- 3. (Original) The method of Claim 1 wherein the emulsion polymer is selected from (meth)acrylic ester monomers, methyl acrylate, ethyl acrylate, butyl acrylate, 2-ethylhexyl acrylate, decyl acrylate, lauryl acrylate, methyl methacrylate, butyl methacrylate, isodecyl methacrylate, lauryl methacrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate, (meth)acrylonitrile, (meth)acrylamide, amino-functional monomers, ureido-functional monomers, monomers bearing acetoacetate-functional groups, styrene, substituted styrenes, butadiene, ethylene, propylene, α-olefins, 1-decene, vinyl acetate, vinyl butyrate, vinyl esters, vinyl monomers, vinyl chloride, vinylidene chloride and combinations thereof.
- 4. (Original) The method of Claim 1 wherein the ion exchange resin is selected from anion exchange resins, cation exchange resins, mixed bed resins and combinations thereof.

- 5. (Currently Amended) The method of Claim 1 wherein the ion exchange resin is at least 1.71.5 percent solid ion exchange resin <u>based</u> on coating polymer solids.
- 6. (Canceled)
- 7. (Canceled)
- 8. (Canceled)
- 9. (Canceled)
- 10. (Canceled)
- 11. (NEW) The method of Claim 1 wherein the ion exchange resin is at least 1.7 percent solid ion exchange resin based on coating polymer solids.

REMARKS

Election/Restrictions

The Examiner restricted the claims under 35 U.S.C. § 121 for method and composition claims. Applicant's attorney provisionally elected to prosecute the invention of Group I, claims 1-5, and hereby affirms that election without traverse.

Claim Rejections - 35 U.S.C. § 112

The Examiner rejected Claims 1-5 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner stated it was unclear what an "aqueous...copolymer" is in Claim 1, line 10, and asked if it is a copolymer that is soluble in aqueous solution. The term "aqueous emulsion copolymer" has been amended to "aqueous emulsion polymer" to be consistent with the specification, particularly page 3, line 30 through page 7, line 9. Beginning at page 3, line 30, the term "emulsion polymers" is described. The term is well understood in the art as an *emulsion* of the polymer in a liquid medium. By definition it is <u>not</u> soluble in the liquid medium. In Claim 1 the liquid medium is water. An emulsion is an intimate mixture consisting of a semisolid or solid (as a resinous or bituminous material) dispersed in a liquid, usually with the aid of an emulsifier. Webster's Third New International Dictionary (Merriam-Webster, Inc. 1986). An "aqueous emulsion polymer" is a polymer dispersed in water with the aid of emulsifiers.

The Examiner stated that in Claim 1 it is not clear if the resin is a different entity from the "fibers, chips, particles." Claim 1 has been amended, rendering this rejection moot. Support for the amendment is found in the specification at page 2, lines 2-31.

The Examiner stated that the term "based" appears to be missing from Claim 5. This term has been added, rendering this rejection moot.

The Examiner stated that Claim 3 had no antecedent basis for emulsion polymer. Claim 1 has been amended, rendering this rejection moot.

The Examiner rejected Claim 5 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description. Specifically, the Examiner stated that page 3, line 30 describes the ion exchange resin as at least 1.5%, but claim 5 is 1.7%. Claim 5 has been amended to recite 1.5%, rendering this rejection moot. New Claim 11 has been added to claim the 1.7% limitation. Support for 1.7% is found in the examples, particularly samples 16, 20 and 24 of Example 2.

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected Claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over US Patent 5747110. Applicant respectfully disagrees. A prior art reference must be considered in its entirety. M.P.E.P. § 2141.02, 8th Edition (August 2001). Applicant has amended Claim 1 to clarify that a sealing layer is applied to the surface of the compressed mat, thereby producing a laminated or coated product. Support for the sealer or topcoat language is found in the specification, including at page 2, lines 18-31. US '110 teaches incorporation or entrapment of materials within the pores of a woven or non-woven substrate to serve various functions, such as filtration of materials. It is concerned with depositing targeted agents into the three dimensional pore structure of a porous substrate. The process described in '110 is designed to retain the morphology of the substrate and to utilize its pore structure as a means of achieving desired benefits, such as with filtration. Applicant's invention is designed to create a multi-layered composite substrate, typically viewed as a laminate or a coating on top of a set substrate. A sealing layer, described as a sealer or topcoat in the specification, is applied to a surface. A sealer is a coating applied to prevent subsequent coats from sinking into the surface. The specification at page 2, lines 18-31, describes the role of the sealer or topcoat, which includes providing whiteness and blocking resistance. It would not have been obvious to one skilled in the art to use ion exchange resin in topcoats in press molding operations based on the teachings of '110, which describes incorporation of agents into the pore structure of a flexible porous web.

Applicant maintains that such claims are patentable in view of the amendments and arguments presented above. Applicant's invention would not have been obvious to one skilled in the art based on the references cited for the reasons above. Applicant's attorney thanks the Examiner for the time taken to review this response. In view of the foregoing remarks, Applicant respectfully requests reconsideration of the rejection and allowance of the claims. The Examiner is encouraged to contact the attorney listed below if there are any questions or comments.

Respectfully submitted,

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UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Weshington, D.C. 20231



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UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/22/2004

REEL/FRAME: 014447/0970

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

DEMASI, ANNE SETON

DOC DATE: 07/23/2001

ASSIGNOR:

LAUER, ROSEMARIE PALMER

DOC DATE: 08/07/2001

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PHILADELPHIA, PENNSYLVANIA

19106-2399

SERIAL NUMBER: 10081681

PATENT NUMBER:

FILING DATE: 02/25/2002

ISSUE DATE:

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PATENT DEPARTMENT



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APPLICATION NO. ATTORNEY DOCKET NO. CONFIRMATION NO.

10/081.681

06/29/2004

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ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 215 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

APPLICANT(S):

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